# PATENT COOPERATION TREATY

| From the INTERNATIONAL SEARCHING AUTHORITY  | PCT  |  |
|---|--|--|
| To:<br>INTERNATIONAAL OCTROOIBUREAU B.V.<br>Attn. Duijvestijn, Adrianus J<br>Prof. Holstlaan 6  | NOTIFICATION OF TRANSMITTAL OF<br>THE INTERNATIONAL SEARCH REPORT<br>OR THE DECLARATION          |  |
| NL-5656 AA Eindhoven NETHERLANDS  | (PCT Rule 44.1)  |  |
| GKAH  | Date of mailing (day/month/year) 10/02/2003  |  |
| Applicant's or agent's file reference PHUS000295W0  | FOR FURTHER ACTION See paragraphs 1 and 4 below  |  |
| International application No. PCT/EP 01/13813   | International filing date (day/month/year) 26/11/2001  |  |
| KONINKLIJKE PHILIPS ELECTRONICS N.V.  |  |  |
| 1. X The applicant is hereby notified that the International Search   | n Report has been established and is transmitted herewith.                                       |  |
| Filing of amendments and statement under Article 19: The applicant is entitled, if he so wishes, to amend the claim   | s of the International Application (see Rule 46):  |  |
| When? The time limit for filing such amendments is norma<br>International Search Report; however, for more de   | Ily 2 months from the date of transmittal of the tails, see the notes on the accompanying sheet. |  |
| Where? Directly to the International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Fascimile No.: (41–22) 740.14.35   |  |  |
| For more detailed instructions, see the notes on the accordance   | mpanying sheet.  |  |
| 2. The applicant is hereby notified that no International Search Report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.   |  |  |
| 3. With regard to the protest against payment of (an) addition  | nal fee(s) under Rule 40.2, the applicant is notified that:                                      |  |
| the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.  |  |  |
| no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.   |  |  |
| 4. Further action(s): The applicant is reminded of the following:  Shortly after 18 months from the priority date, the international application will be published by the International Bureau.   |  |  |
| Shortly after <b>18 months</b> from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90 <i>bis</i> .1 and 90 <i>bis</i> .3, respectively, before the completion of the technical preparations for international publication. |  |  |
| Within 19 months from the priority date, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later).  |  |  |
| Within 20 months from the priority date, the applicant must perform the prescribed acts for entry into the national phase before all designated Offices which have not been elected in the demand or in a later election within 19 months from the priority date or could not be elected because they are not bound by Chapter II.  |  |  |
| Name and mailing address of the International Searching Authority   | Authorized officer   |  |
| European Patent Office, P.B. 5818 Patentlaan 2<br>NL-2280 HV Rijswijk<br>Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,<br>Fax: (+31-70) 340-3016   | Sylvie Hue   |  |

Form PCT/iSA/220 (July 1998)

## PATENT COOPERATION TREATY

PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

| Applicant's or agent's file reference  | (Form PCT/ISA/2  | f Transmittal of International Search Report<br>20) as well as, where applicable, item 5 below. |  |  |  |
|--|--|---|--|--|--|
| PHUS000295W0 International application No.   | ACTION International filing date (day/month/year)  | (Earliest) Priority Date (day/month/year)   |  |  |  |
|  |  |   |  |  |  |
| PCT/EP 01/13813  | 26/11/2001   | 06/12/2000  |  |  |  |
| Applicant  |  |   |  |  |  |
| KONINKLIJKE PHILIPS ELECT  | KONINKLIJKE PHILIPS ELECTRONICS N.V.   |   |  |  |  |
|  |  |   |  |  |  |
| This International Search Report has been according to Article 18. A copy is being tra   | n prepared by this International Searching Authansmitted to the International Bureau.  | nority and is transmitted to the applicant  |  |  |  |
| This International Search Report consists  | of a total of sheets.  |   |  |  |  |
| X It is also accompanied by  | a copy of each prior art document cited in this  | report.   |  |  |  |
| Basis of the report  |  |   |  |  |  |
| a. With regard to the language, the  | international search was carried out on the bas<br>ess otherwise indicated under this item.                                  | sis of the international application in the   |  |  |  |
| the international search w<br>Authority (Rule 23.1(b)).  | as carried out on the basis of a translation of the  | he international application furnished to this  |  |  |  |
| b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing: |  |   |  |  |  |
| 1  | onal application in written form.  |   |  |  |  |
| filed together with the inte   | rnational application in computer readable form  | n.  |  |  |  |
| furnished subsequently to  | this Authority in written form.  |   |  |  |  |
| furnished subsequently to  | this Authority in computer readble form.   |   |  |  |  |
|  | osequently furnished written sequence listing d<br>s filed has been furnished.   | oes not go beyond the disclosure in the   |  |  |  |
| the statement that the info<br>furnished   | ormation recorded in computer readable form is   | s identical to the written sequence listing has been  |  |  |  |
| 2. Certain claims were fou   | nd unsearchable (See Box I).   |   |  |  |  |
| 3. Unity of invention is lac   | king (see Box II).   | •   |  |  |  |
| 4. With regard to the title,   |  |   |  |  |  |
| the text is approved as submitted by the applicant.  |  |   |  |  |  |
| the text has been established by this Authority to read as follows:  |  |   |  |  |  |
| METHOD AND APPARATUS FOR CREATING AND TESTING A CHANNEL DECODER WITH BUILT-IN SELF-TEST (BIST)   |  |   |  |  |  |
| 5. With regard to the <b>abstract</b> ,  |  |   |  |  |  |
| the text is approved as submitted by the applicant.  |  |   |  |  |  |
| the text has been establis   | TYLL the test has been established, expending to Dule 29.2(h) by this Authority as it expenses in Day III. The applicant may |   |  |  |  |
| 6. The figure of the <b>drawings</b> to be published   | •  | 1   |  |  |  |
| as suggested by the appli  | cant.  | None of the figures.  |  |  |  |
| because the applicant fail   | ed to suggest a figure.  |   |  |  |  |
| because this figure better   | characterizes the invention.   |   |  |  |  |

International application No.

#### **INTERNATIONAL SEARCH REPORT**

PCT/EP 01/13813

B x III TEXT OF THE ABSTRACT (Continuation of item 5 of the first sheet)

The invention provides a method and apparatus for creating and testing a channel decoder with built-in self-test (100). The method and apparatus consist of simulating any specified channel decoder architecture and operation. The simulated channel decoder is then modified for built-in self-test (BIST). A production test signal is created as a product of the modified channel decoder simulation. A channel decoder patterned after the modified channel decoder simulation is manufactured. The manufactured channel decoder is then tested using the production test signal and BIST.

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G01R31/3167 G01R31/3187 H04B17/00

According to International Patent Classification (IPC) or to both national classification and IPC

#### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 GO1R HO4B GO6F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC

|            | NTS CONSIDERED TO BE RELEVANT   |                       |
|------------|---|-----------------------|
| Category ° | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
| Χ          | DUFORT B ET AL: "SIGNAL GENERATION USING PERIODIC SINGLE AND MULTI-BIT SIGMA-DELTA MODULATED STREAMS" PROCEEDINGS OF THE INTERNATIONAL TEST CONFERENCE. ITC '97. WASHINGTON, DC, NOV. 1 - 6, 1997, INTERNATIONAL TEST CONFERENCE, NEW YORK, NY: IEEE, US, vol. CONF. 28, 1 November 1997 (1997-11-01), pages 396-405, XP000800336 ISBN: 0-7803-4210-0 abstract; figure 1 page 396, paragraph I page 403, paragraph A -page 404, paragraph A | 9                     |
| Υ          |   | 12                    |
|            | -/  |                       |

| X Further documents are listed in the continuation of box C.  | χ Patent family members are listed in annex.  |
|---|---|
| Special categories of cited documents:  "A" document defining the general state of the art which is not considered to be of particular relevance  "E" earlier document but published on or after the international filling date  "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  "O" document referring to an oral disclosure, use, exhibition or other means  "P" document published prior to the international filling date but later than the priority date claimed | <ul> <li>'T' later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</li> <li>'X' document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</li> <li>'Y' document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</li> <li>'&amp;' document member of the same patent family</li> </ul> |
| Date of the actual completion of the international search   | Date of mailing of the international search report  |
| 23 January 2003   | 10/02/2003  |
| Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2  NL - 2280 HV Rijswijk  Tel. (+31-70) 340-2040, Tx. 31 651 epo nt,  Fax: (+31-70) 340-3016  | Authorized officer Hijazi, A  |

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|            |  | PC1/EP 01/13813       |  |
|------------|--|-----------------------|--|
| C.(Continu | C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT   |                       |  |
| Category ° | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |  |
| X          | ROBERTS G W ET AL: "MAKING COMPLEX MIXED-SIGNAL TELECOMMUNICATION INTEGRATED CIRCUITS TESTABLE" IEEE COMMUNICATIONS MAGAZINE, IEEE SERVICE CENTER. PISCATAWAY, N.J, US, vol. 37, no. 6, June 1999 (1999-06), pages 90-96, XP000835284 ISSN: 0163-6804 page 94, column 2 -page 95; figure 7   | 17                    |  |
| Y          | page and the second of the sec | 1                     |  |
| Y          | PICHON F: "Testability features for a submicron voice-coder ASIC" PROCEEDINGS. INTERNATIONAL TEST CONFERENCE 1996. TEST AND DESIGN VALIDITY (IEEE CAT. NO.96CH35976), PROCEEDINGS INTERNATIONAL TEST CONFERENCE 1996. TEST AND DESIGN VALIDITY, WASHINGTON, DC, USA, 20-25 OCT. 1996, pages 377-385, XPO02228502   | 1                     |  |
| ·          | 1996, Altoona, PA, USA, Int. Test Conference, USA ISBN: 0-7803-3541-4 page 383 -page 384, column 1; figure 8   |                       |  |
| Y          | US 6 118 811 A (CHEN RICKY Y ET AL) 12 September 2000 (2000-09-12) column 5, last paragraph; figure 1  | 6                     |  |
| Y          | PAPACHRISTOU C A ET AL: "Microprocessor based testing for core-based system on chip" DESIGN AUTOMATION CONFERENCE, 1999. PROCEEDINGS. 36TH NEW ORLEANS, LA, USA 21-25 JUNE 1999, PISCATAWAY, NJ, USA, IEEE, US, 21 June 1999 (1999-06-21), pages 586-591, XP010344097 ISBN: 1-58113-092-9 page 587, column 1, line 38 - line 46  | 6,12                  |  |
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US 0973065905P1



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Total number of pages: 1

Remarks:

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